



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,906	09/28/2001	Linda Ann Roberts	36968/264493	4246

23552 7590 07/22/2004

MERCHANT & GOULD PC  
P.O. BOX 2903  
MINNEAPOLIS, MN 55402-0903

EXAMINER

COUSO, YON JUNG

ART UNIT	PAPER NUMBER
----------	--------------

2625

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/965,906

Applicant(s)

ROBERTS ET AL.

Examiner

Yon Couso

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2625

1. Applicant's amendment/arguments filed May 3, 2004 have been fully considered but are not persuasive.

a. The applicants have amended claims to include "an operations processor coupled to the image processor for identifying an operation of a particular home appliance associated with the gesture by comparing the recognized gesture with each of a predefined set of gesture, wherein each of the predefined gestures is associated with a respective operation of a particular home appliance". The examiner notes that the references still read on the amended claims. The predefined gestures associated with a respective operation of a particular home appliance could be particular gesture pointing in the direction of the particular appliance.

b. The applicants argue that Kohler must perform a first pointer click gesture to select a device and a second additional gesture to initiate a task of the device, in contrast to the present invention which recites that a gesture is performed and then compared to each of a predefined set of gestures associated with a respective operation of a particular home appliance to identify the particular operation of the particular home appliance to perform. The examiner disagrees. What the applicants describe as the first and second gestures can be read as a gesture. The definition of gesture is a movement of body. It would be almost impossible to segment the movement of body and label them as first and second and so forth. The sequence of body movement in Kohler reads on the claimed language.

c. The applicants argue that Launey does not each or suggest an operations processor coupled to the image processor for identifying an operation particular home

Art Unit: 2625

appliance associated with the gesture by comparing the recognized gesture with each of a predefined set of gestures, wherein each of the predefined gesture is associated with a respective operation of a particular home appliances. Launey was cited in the rejection to show a home automation system comprising an image processor that receives a video signal corresponding to home appliance control (column 11, lines 35-67 and figure 1, elements 10 and 26). The rejection is based on the combination of Kohler and Launey references. The examiner noted that the nonobviousness cannot be established by attacking references individually when the rejection is predicated upon a combination of prior art disclosure. In re Merck and Co., Inc. 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986) and In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2625

Claims 1-10 are rejected under 35 U.S.C. § 103 as being unpatentable over Kohler ("System Architecture and Techniques for Gesture Recognition in Unconstraint Environments", M.R. J. Kohler, Virtual Systems and Multimedia, IEEE 1997, pages 137-146) in view of Launey et al. (US 5,086,385).

The arguments advanced in paragraph 1 above as to the applicability of the references are incorporated herein.

Regarding claims 1 and 9, Kohler discloses a system for controlling home appliances by gesture comprising: an image receiver for receiving a continuous stream of gesture images of a gesture performed within a field of view of the image receiver (page 137, left column and page 139, figure 4 (a)); a system that receives the video signal corresponding to the continuous stream of gesture images and recognizes gesture based on information contained in the video signal (page 141, section 3, Object Recognition and Tracking); a system for identifying an operation of a particular home appliance associated with the gesture by comparing the recognized gesture with each of a predefined set of gesture, wherein each of the predefined gestures is associated with a respective operation of a particular home appliance (page 138, left column); an appliance controller coupled to the system for causing home appliance operation to be performed (page 140, Table 1).

Kohler discloses a generic home appliance controlling system without specific details regarding an image processor that receives a video signal.

Art Unit: 2625

In the same field of endeavor, however, Launey discloses a home automation system comprising an image processor that receives a video signal corresponding to home appliance control (column 11, lines 35-67 and figure 1, elements 10 and 26).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use an image processor as taught by Launey in the system of Kohler because it provides Kohler with a home automation appliance control system which is expandable and supports multiple numbers and different types of data communications interfaces.

As to claim 10, claim 10 is a method claim corresponding to apparatus claims 1 and 9 above and recite substantially very similar limitations and therefore is similarly analyzed as apparatus claims 1 and 9 above.

As to claims 2-3, while Kohler is silent about the specific details regarding a voltage generator generating a voltage signal and pulse, Launey discloses a home automation system that generates voltage signal and a pulse (column 9, lines 1-30).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a voltage generator as taught by Launey in the system of Kohler because it provides Kohler with a home automation appliance control system which is expandable and supports multiple numbers and different types of data communications interfaces. Additionally, such appliance controllers are routinely designed to operate using voltage or current pulse signal.

Art Unit: 2625

As to claims 4-6, Kohler discloses the system that indicates the home appliance operation being performed and stores the representative gesture (page 139, figure 4(c) and page 140). All other limitations of claims 4-6 are similarly as claims 1-3 above.

As to claim 7, Kohler identifies the home appliance operation by comparing the recognized gesture with each of a predefined set of gestures (page 139, left column).

As to claim 8, while Kohler is silent about a switch coupled to the appliance, Launey discloses a switch coupled to the appliance adapted to be coupled to the home appliance, wherein switch is responsive for causing the home appliance operation to be performed (column 52, lines 18-45).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a switch coupled to the appliance as taught by Launey in the system of Kohler because it provides Kohler with a home automation appliance control system which is expandable and supports multiple numbers and different types of data communications interfaces. Additionally, appliance control switches are routinely used in home automation system for computer, remote or gesture controlled environment.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yon Couso whose telephone number is (703) 305-4779. The examiner can normally be reached on 8:30 am –5:00 pm from Monday to Friday

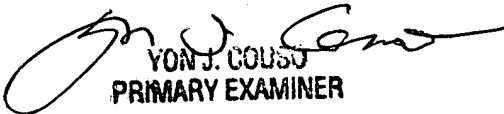
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 09/965,906

Page 7

Art Unit: 2625

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

  
YON J. COLUSO  
PRIMARY EXAMINER

Yjc

July 20, 2004